AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A two-fluid nozzle for cleaning substrates which mixes gas and liquid internally and injects liquid droplets with gas so as to clean a substrate, comprising:

a gas supply passage for supplying gas, a liquid supply passage for supplying liquid, and a lead-out passage for leading out internally-formed liquid droplets,

wherein an injection port for injecting liquid droplets to the outside is formed at the front end of said lead-out passage, and

wherein a cross-sectional area Sb of said injection port is formed smaller than a cross-sectional area Sa of said lead-out passage, and a cross-sectional area Sc of an exit of said gas supply passage is formed smaller than the cross-sectional area Sa of said lead-out passage, and

wherein said lead-out passage is formed in a straight shape, and the cross-sectional area Sb of said injection port is formed constant from an entrance thereof to an exit thereof.

2. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein a ratio Sa : Sb between the cross-sectional area Sa of said lead-out passage and the cross-sectional area Sb of said injection port is 1:0.25 to 0.81.

3. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein the cross-sectional area Sc of the exit of said gas supply passage is formed equal to the cross-sectional area Sb of said injection port or smaller than the cross-sectional area Sb of said injection port.

4. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 3,

wherein a ratio Sb : Sc between the cross-sectional area Sb of said injection port and the cross-sectional area Sc of the exit of said gas supply passage is 1: 0.16 to 0.87.

5. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 4,

wherein the cross-sectional area Sc of the exit of said gas supply passage is 1.13 mm^2 to 6.16 mm^2.

6. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 4,

wherein the cross-sectional area Sc of the exit of said gas supply passage is 1.77 mm^2 to 4.91 mm^2.

7. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein said lead-out passage is formed in a straight shape, and the cross-sectional area Sa of said lead-out passage is constant.

8. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein a length L1 of said lead-out passage is 10 mm to 90 mm.

9. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein a length L2 of said injection port is 30 mm or shorter.

10. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1, comprising a liquid introduction passage in an annular shape surrounding said gas supply passage, and having a structure such that

said gas supply passage is arranged coaxially with said lead-out passage,

said liquid supply passage is opened on an outer peripheral face of said liquid introduction passage,

a taper portion is formed with a diameter which gets smaller toward a front end side in said liquid introduction passage,

the taper portion is opened between said gas supply passage and said lead-out passage, and

gas supplied from said gas supply passage and liquid introduced from said liquid

introduction passage are mixed to form liquid droplets and the liquid droplets are lead out via said lead-out passage.

11. (Original) The two-fluid nozzle for cleaning substrates as set forth in claim 1,

wherein said injection port is formed with a vertical cross-sectional shape of an exit side periphery having a right angle or an acute angle.

12. (Original) A substrate cleaning apparatus, comprising:

a two-fluid nozzle for cleaning substrates as set forth in claim 1;

a spin chuck for holding a substrate substantially horizontally; and

a drive mechanism for moving said two-fluid nozzle for cleaning substrates above the substrate.